Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1 (Currently amended). A method of selecting an intensity threshold in a ~~for an image~~ halftoning system used to render respective pixels of an image on a display, said halftoning system providing respective accumulated errors, each based on at least one respective variance between a rendered intensity of a pixel and a quantized measured intensity of a corresponding pixel of a contone image to be displayed, each respective accumulated error subject to recalculation pixel-by-pixel, said method comprising the steps of:

    (a)   selecting a ~~predetermined~~ first predetermined intensity threshold if either one of said accumulated errors of a current pixel and a neighboring pixel exceeds a first error threshold;

    (b)   selecting a ~~predetermined~~ second predetermined intensity threshold if said accumulated error of a pixel remotely neighboring said current pixel exceeds a second error threshold and said first predetermined intensity threshold is not selected; ~~and~~

    (c)   selecting a ~~predetermined~~ third predetermined intensity threshold if neither of said first and said second intensity thresholds are selected; and

    (d)   rendering a pixel of said image on a display based upon said selected predetermined intensity threshold.

2 (Original). The method of claim 1 wherein at least one of said first and second error thresholds is substantially zero error.

3 (Currently amended). The method of claim 1 wherein an intensity of said first predetermined intensity threshold is greater than an intensity of said second predetermined intensity threshold and said intensity of said second predetermined intensity threshold is greater than an intensity of said third predetermined intensity threshold.

4 (Currently amended). The method of claim 1 wherein at least one of said accumulated errors of said first pixel, said neighboring pixel, and said remote neighboring pixel comprises a component color error for said pixel.

5 (Currently amended). A halftone image display method providing respective accumulated pixel errors, each based on at least one respective variance between a rendered intensity of a pixel and a quantized measured intensity of a corresponding pixel of a contone image to be displayed, each respective accumulated error subject to recalculation pixel-by-pixel, said method comprising the steps of:

(a)   determining an intensity of a current pixel in an image;

(b)   augmenting said intensity of said current pixel with a current said accumulated pixel error;

(c)   selecting a ~~predetermined~~ first predetermined intensity threshold if either one of said current said accumulated pixel error and a neighboring said accumulated pixel error is less than an error threshold and otherwise selecting a ~~predetermined~~ second predetermined intensity threshold;

(d)   displaying said current pixel with a first displayed intensity if said augmented intensity of said current pixel exceeds said selected predetermined intensity threshold and otherwise displaying said current pixel with a second displayed intensity; and

(e)   assigning an error between said displayed intensity and said augmented intensity of said current pixel to at least one pixel neighboring said current pixel.

6 (Original). The method of claim 5 wherein said error threshold is substantially zero error.

7 (Previously presented). The method of claim 5 wherein said first displayed intensity comprises a maximum intensity and said second displayed intensity comprises a minimum intensity.

8 (Original). The method of claim 5 where said intensity of said current pixel comprises an intensity of a color component of said pixel.

9 (Currently amended). The method of claim 5 wherein an intensity of said first <u>predetermined</u> intensity threshold is greater than an intensity of said second <u>predetermined</u> intensity threshold.

10 (Currently amended). The method of claim 5 further comprising the step of displaying said current pixel with said first displayed intensity if said augmented intensity of said current pixel exceeds a third <u>predetermined</u> intensity threshold, an intensity of said third <u>predetermined</u> intensity threshold being greater than an intensity of said first <u>predetermined</u> intensity threshold.

11 (Previously presented). The method of claim 5 wherein at least one of said current said accumulated pixel error and said neighboring accumulated pixel error comprises a component color error.

12 (Currently amended). An error diffusion halftone image display method providing respective accumulated errors<u>, each based on at least one respective variance between a rendered intensity of a pixel and a quantized measured intensity of a corresponding pixel of a contone image to be displayed, each respective accumulated error</u> subject to recalculation pixel-by-pixel, said method comprising the steps of:

    (a)   determining an intensity of a current pixel in an image;

    (b)   augmenting said intensity of said current pixel with a current pixel accumulated error;

    (c)   selecting a ~~predetermined~~ first <u>predetermined</u> intensity threshold if either one of said current pixel accumulated error and an immediate neighboring pixel accumulated error is less than a first error threshold;

    (d)   selecting a ~~predetermined~~ second <u>predetermined</u> intensity threshold if a remote neighboring pixel accumulated error is less than a second error threshold and said first error threshold is not selected;

-4-

(e)   selecting a ~~predetermined~~ third <u>predetermined</u> intensity threshold if a more remote neighboring pixel accumulated error is less than a third error threshold and neither of said first and said second error thresholds are selected;

(f)   selecting a ~~predetermined~~ fourth <u>predetermined</u> intensity threshold if one of said first, said second, and said third <u>predetermined</u> intensity thresholds is not selected;

(g)   displaying said current pixel with one of a first displayed intensity if said augmented intensity of said current pixel exceeds said selected <u>predetermined</u> intensity threshold and otherwise displaying said current pixel with a second displayed intensity; and

(h)   assigning an error between said displayed intensity and said augmented intensity of said current pixel to at least one pixel neighboring said current pixel.

13 (Previously presented). The method of claim 12 wherein at least one of said first, said second, and said third error thresholds is substantially zero accumulated error.

14 (Previously presented). The method of claim 12 wherein said first displayed intensity comprises a maximum intensity and said second displayed intensity comprises a minimum intensity for said pixel.

15 (Original). The method of claim 12 wherein said intensity of said current pixel comprises an intensity of a color component of said pixel.

16 (Currently amended). The method of claim 12 wherein an intensity of said first <u>predetermined</u> intensity threshold is greater than an intensity of said second <u>predetermined</u> intensity threshold, said intensity of said second <u>predetermined</u> intensity threshold is greater than an intensity of said third <u>predetermined</u> intensity threshold, and said intensity of said third <u>predetermined</u> intensity threshold is greater than an intensity of said fourth <u>predetermined</u> intensity threshold.

17 (Original). The method of claim 12 further comprising the step of displaying said current pixel with a maximum displayed intensity if said augmented intensity of said current pixel exceeds a fifth <u>predetermined</u> intensity threshold, an intensity of said fifth <u>predetermined</u> intensity threshold being greater than an intensity of said first <u>predetermined</u> intensity threshold.

18 (Previously presented). The method of claim 12 wherein at least one of said current pixel accumulated error, said neighboring pixel accumulated error, and said remote neighboring pixel accumulated error comprises a component color error.

19 (Original). The method of claim 18 wherein said component color error comprises an error for a component color other than the component color of the current pixel.

20 (Currently amended). A halftone encoder <u>residing on an electronic device and</u> providing respective accumulated errors<u>, each based on at least one respective variance between a rendered intensity of a pixel and a quantized measured intensity of a corresponding pixel of a contone image to be displayed, each respective accumulated error</u> subject to recalculation pixel-by-pixel, said encoder comprising:

    (a)   a selected thresholding unit comparing an input intensity of a current pixel to a selected threshold intensity; and

    (b)   a threshold selection unit selecting ~~a predetermined~~ one of a plurality of <u>predetermined</u> threshold intensities for said selected threshold unit in response to at least one of said accumulated errors of said current pixel and a pixel neighboring said current pixel.

21 (Currently amended). The ~~apparatus~~ <u>encoder</u> of claim 20 further comprising an initial thresholding unit comparing said input intensity of said current pixel to an initial threshold intensity, said initial threshold being greater than said selected threshold intensity.

22 (Currently amended). The ~~apparatus~~ <u>encoder</u> of claim 20 further comprising:

(a)   an error filter distributing an error produced by printing said current pixel to a plurality of pixels neighboring said current pixel; and

    (b)   an error buffer accumulating said distributed error for a pixel.